UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,419	12/12/2003	Pi-Hai Liu	MTKP0070USA	1418

27765   7590   06/14/2007
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EXAMINER
JEANGLAUDE, JEAN BRUNER

ART UNIT	PAPER NUMBER
2819	

NOTIFICATION DATE	DELIVERY MODE
06/14/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)
Office Action Summary	10/707,419	LIU, PI-HAI
	Examiner	Art Unit	
	Jean B. Jeanglaude	2819	

-- The *MAILING DATE* of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE **3** MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _12 December 2003_.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-38_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-5, 9-15, 19-24, 28-34 and 38_ is/are rejected.

7)☒ Claim(s) _6-8, 16-18, 25-27 and 35-37_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _12 December 2003_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892) 4)☐ Interview Summary (PTO-413)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   Paper No(s)/Mail Date. _____.
3)☐ Information Disclosure Statement(s) (PTO/SB/08) 5)☐ Notice of Informal Patent Application
   Paper No(s)/Mail Date _____. 6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   Claims 1 - 5,9 -15,19 - 24, 28 - 34, 38 are rejected under 35 U.S.C. 102(b) as

being anticipated by Kitamura (US Patent Number 6,388,588).

3.   Regarding claims 1, 20, Kitamura discloses a device and method (figs. 1 – 3, 5,

19) for encoding a bit stream of data bits of a binary source signal into a stream of data

bits of a binary channel signal, m-bit source words are converted to n-bit codeword, the

device comprising: converting means (5e, 5f, fig. 2) used to convert source words

having a variable word length (5c, fig. 2) with a basic word length of m bits and a total

word length of m*i bits into n*i-bit codewords, i being an integer of at least 1; wherein

the converting means limits a characteristic of the codeword specified for each starting

bit position in the code word (fig. 5).

4.   Regarding claims 2, 21, Kitamura discloses a device and method (figs. 1 – 3, 5,

19) wherein the converting means preserves the parity of the m-bit source words over

the codeword (figs. 1 – 3, 5, 19).

5.   Regarding claims 3, 22, Kitamura discloses a device and method (figs. 1 – 3, 5,

19) wherein the converting means limits a maximum number of repeating bit patterns

specified for each starting bit position in the codeword (fig. 5).

6.   Regarding claims 4, 23, Kitamura discloses a device and method (figs. 1 – 3, 5, 19) wherein the converting means limits a maximum number of the consecutive appearances of the minimum run of zeros d for each starting bit position in the codeword (figs. 1 – 3, 5, 19).

7.   Regarding claims 5, 24, Kitamura discloses a device and method (figs. 1 – 3, 5, 19) of claim 1, wherein the converting means limits a maximum run of zeros k for each starting bit position in the codeword (figs. 1 – 3, 5, 19).

8.   Regarding claims 9, 28, Kitamura discloses a device and method (figs. 1 – 3, 5, 19) wherein the converting means determines the codeword by referring to an immediately succeeding string of m-bit source words (figs. 1 – 3, 5, 19).

9.   Regarding claims 10, 29, Kitamura discloses a device and method (figs. 1 – 3, 5, 19) wherein the converting means determines the codeword by referring to an immediately preceding code word (figs. 1 – 3, 5, 19).

10.   Regarding claims 11, 30, Kitamura discloses a device and method (figs. 1 – 3, 5, 22) for decoding a bit stream of data bits of a binary channel signal into a stream of data bits of a binary source signal, n bits channel codeword are converted to m-bit source words, the device comprising: converting means (13, fig. 1) used to convert codeword having a variable code length9c, fig. 3) with a basic code length of n bits and a total code length of n*i bits into m*i-bit source words, i being an integer of at least 1; wherein the bit stream of channel code words have a characteristic specified for each starting bit position in the code word (figs. 1 – 3, 5, 19).

11.   Regarding claims 12, 31, Kitamura discloses a device and method (figs. 1 – 3, 5, 22) wherein the converting means preserves the parity of the codeword over the m-bit source words (figs. 1 – 3, 5, 22).

12.   Regarding claims 13, 32, Kitamura discloses a device and method (figs. 1 – 3, 5, 22) wherein the codeword are limited with a maximum number of repeating bit patterns specified for each starting bit position (fig. 5).

13.   Regarding claim 14, 33, Kitamura discloses a device and method (figs. 1 – 3, 5, 22) wherein codeword are limited with a maximum number of the consecutive appearances of the minimum run of zeros d for each starting bit position in the codeword (fig. 5).

14.   Regarding claims 15, 34, Kitamura discloses a device and method (figs. 1 – 3, 5, 22) wherein codeword are limited with a maximum run of zeros k for each starting bit position in the codeword (fig. 5).

15.   Regarding claims 19, 38, Kitamura discloses a device and method (figs. 1 – 3, 5, 22) wherein the converting means determines the m-bit source words by referring to an immediately succeeding string of codeword (figs. 1 – 3, 5, 22).

Allowable Subject Matter

16.   Claims 6 – 8, 25 – 27, 35 – 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

17.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (See PTO-892).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Jeanglaude whose telephone number is 571-272-1804. The examiner can normally be reached on Monday - Friday 7:30 A. M. - 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rexford Barnie can be reached on 571-272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jean Bruner Jeanglaude
Primary Examiner
June 5, 2007